

Date: Thu, 10 Feb 94 04:30:10 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #130
To: Info-Hams

Info-Hams Digest Thu, 10 Feb 94 Volume 94 : Issue 130

Today's Topics:

Anyone Hear from Space Shuttle?
ARRL CONTEST
Field Day Logging Program
FY5YP,T05M,ZS3AW QSL routes?
Golf Causes Cancer!
Radar Detector Detectors
SAREX Keps for Feb 10
Smithsonian amateur station
Vertical Antennas (2 msgs)
W2NSD

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 7 Feb 1994 19:56:02 GMT
From: nntp.ucsb.edu!library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!
cs.utexas.edu!gerald@cc.utexas.edu!portal.austin.ibm.com!awdprime.austin.ibm.com!
blood@network.ucsd.edu
Subject: Anyone Hear from Space Shuttle?
To: info-hams@ucsd.edu

Has anyone heard the shuttle on 2mtrs? With 3 hams out there and
a broken satellite, perhaps they have some time on their hands.
Or just too busy trying to fix it. Where Do I listen? 145.55?

Date: Thu, 10 Feb 1994 02:54:00 GMT
From: ax!sec21!gerson.rissin@uunet.uu.net
Subject: ARRL CONTEST
To: info-hams@ucsd.edu

ALL,

I hope to meet everyone February 19 and 20 during the
CW ARRL CONTEST, specially on 20, 15 and 10 m.

Best 73, Gerson Rissin - PY1APS, PY7APS
ex PY0APS

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##### Super Tag #####  
#                                                    #  
#      [] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL      #  
#
```

Date: Mon, 7 Feb 1994 07:39:41 -0500
From: nntp.ucsb.edu!library.ucla.edu!agate!howland.reston.ans.net!news.ans.net!
malgudi.oar.net!news.ysu.edu!psuvml!cunyvml!rohvm1!rohvm1.mah48d@network.ucsd.edu
Subject: Field Day Logging Program
To: info-hams@ucsd.edu

In article <CKo1r7.InH@srigenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom)
wrote:

> The problem with logging programs for Field Day is that most of the
> operators will be "learning on the job." I have found that I can keep
> the log and dupe sheets on paper much faster than most operators can
> work the computer, at least until they have a few hours of practice
> under their belts.
>
> If most of your operators already are familiar with one of the popular
> logging programs, then use that one. If not, then pick the program that
> is easiest/fastest to learn to use and have a training session some
> evening before Field Day starts.
>

At Penn Wireless Association, we've been using logging software at Field
Day for about four years now. At first only about three stations used it,
but their performance was so much superior to the paper loggers that we
shifted universally. Despite sagging attendance at Field Day, we're still
fielding eight to ten stations primarily because the computer eliminates
the need for a human logger.

As far as we're concerned, any learning problems are worth suffering through, because of the ultimate gains.

--

73 de John Taylor W3ZID
rohvm1.mah48d@rohmmaas.com

Date: Wed, 9 Feb 1994 23:32:30 GMT
From: netcon!bongo!netcomsv!netcom.com!slay@locus.ucla.edu
Subject: FY5YP,T05M,ZS3AW QSL routes?
To: info-hams@ucsd.edu

I'm wondering if anybody can tell me the current QSL routing for FY5YP, T05M, and ZS3AW. The first two were worked this year and the latter was worked a couple of times in the early 1970s. ZS3AW was in what is now Namibia (V5) but I'd sure like to know how to track him down. Thanks and 73 de Sandy WA6BXH/7J1ABV slay@netcom.com

Date: 9 Feb 1994 06:17:35 -0500
From: nntp.ucsb.edu!mustang.mst6.lanl.gov!nntp-server.caltech.edu!netline-fddi.jpl.nasa.gov!elroy.jpl.nasa.gov!usc!howland.reston.ans.net!news.intercon.com!udel!news.sprintlink.@@library.ucla.edu
Subject: Golf Causes Cancer!
To: info-hams@ucsd.edu

In article <CKxq14.LvA@srgenprp.sr.hp.com>, Alan Bloom wrote:
> to investigate the death rates of golf course managers. The study
> found that golf course managers have death rates from several kinds
> of cancer that are significantly higher than the national norm. The
>
> Sounds exactly like the famous Milham study of amateur radio operators
> which implied that exposure to RF radiation causes cancer. I wonder
> what the cause is for the golf course managers: too much fresh air?

I'd venture a guess that the death rate is probably due to the exposure to chemicals and insecticides used in grounds keeping. This is also the theoretical reason why Long Island, NY has the highest incident of breast and testicular cancer. Except in L.I.'s case, it is believed to be residue of chemicals, (DDT the most likely culprit), used decades ago that has seeped into the aquifer. Most L.I. residents get their drinking water from wells.

There is also the possibility that some golf courses may be near high tension lines or broadcast towers.

To: info-hams@ucsd.edu

SB SAREX @ AMSAT \$STS-60.015
SAREX Keps for Feb. 10

Gil Carman, WA5NOM reports that there was a separation burn yesterday afternoon which raised the Shuttle perigee altitude about 3 n.mi. The following are elements from the post-burn vector.

STS-60

```
1 22977U 94006A 94041.68880588 .00001098 -91503-7 80760-5 0 143
2 22977 56.9892 183.8290 0006683 303.1211 56.9216 15.71605210 1146
```

Satellite: STS-60

Catalog number: 22977

Epoch time: 94041.68880588 = (10 FEB 94 16:31:52.82 UTC)

Element set: 014

Inclination: 56.9892 deg

RA of node: 183.8290 deg

Eccentricity: .0006683

Arg of perigee: 303.1211 deg

Mean anomaly: 56.9216 deg

Mean motion: 15.71605210 rev/day

Decay rate: 1.098e-05 rev/day^2

Epoch rev: 114

Checksum: 301

Space Shuttle Flight STS-60
Keplerian Element set JSC-014
from NASA flight Day 8 vector

G. L. Carman

NASA Johnson Space Center

Submitted by Frank H. Bauer, KA3HDO, for the SAREX Working Group

/EX

Date: 7 Feb 94 20:18:00 GMT

From: agate!howland.reston.ans.net!vixen.cso.uiuc.edu!sdd.hp.com!col.hp.com!csn!
yuma!galen@network.ucsd.edu

Subject: Smithsonian amateur station

To: info-hams@ucsd.edu

In article <LEVIN.94Feb7140557@medea.bbn.com> levin@bbn.com (Joel B Levin) writes:

>In article <CMM.0.90.4.760366622.hcheyney@magnus.acs.ohio-state.edu>

hcheyney@magnus.acs.ohio-state.edu (Harold E Cheyney) writes:

> I remember reading something on this group about an amateur station located
> somewhere in the Smithsonian in D.C.. Anyone know anything about it?

>You'll find NN3SI (yes, really) in the lower level of the Technology

>building (whatever it's called these days - the big one next to the

>Natural History building) in a walk through area covering the topic of

>Communication.

> /JBL KD10N

The American History Museum is where I found it in Dec '93. They ask that you call a day or two ahead to reserve time for operating, and I've left the numbers in my '93 book at home.

If I remember correctly, the exhibit is in the north-west corner on the second floor.

Looking forward to another call from NN3SI,
Galen, KF0YJ

Date: Mon, 7 Feb 1994 20:46:31 GMT
From: agate!howland.reston.ans.net!vixen.cso.uiuc.edu!sdd.hp.com!col.hp.com!
srgenprp!alanb@network.ucsd.edu
Subject: Vertical Antennas
To: info-hams@ucsd.edu

If you compare a vertical over an infinite ground plane to a dipole (or any other antenna) in free space, you are comparing apples to oranges.

When thinking about antenna gain, it helps immensely to remember the principle of conservation of energy. Nearly all full-sized antennas are essentially 100% efficient. That means that a dipole, a vertical, a rhombic, a Yagi beam, etc. all radiate 1 watt for every watt applied through the feedline. To obtain gain, the antenna directs more of its signal in one direction and less in another.

Any antenna over an infinite ground plane has a 3 dB (2x power) advantage over an antenna in free space. That's because it only has 1/2 of all possible directions in which to send its signal.

Consider a vertical dipole in free space. You could insert a horizontal infinite ground plane at the feedpoint without changing the radiation pattern. Now you have two verticals, one pointing up, one pointing down. Each vertical radiates half the power of the original dipole. Note that the upper vertical (over a groundplane) can generate the same field strength as the dipole (in free space), but with only 1/2 the power. So a 1/4-wave vertical over an infinite ground plane has 3 dB power "gain" over a dipole in free space.

Now consider a dipole suspended a half wavelength or more over an infinite ground plane. In some directions, it will have 6 dB gain over a dipole in free space, which gives 3 dB gain over the vertical. In other directions, the field will be zero. If you averaged the radiated power over all directions (half sphere), you would find it sums to the same power as the 1/4-wave vertical (also averaged over all directions.)

AL N1AL

Date: Wed, 9 Feb 1994 02:00:41 GMT
From: ucsnews!sol.ctr.columbia.edu!math.ohio-state.edu!sdd.hp.com!col.hp.com!
srgenprp!alanb@network.ucsd.edu
Subject: Vertical Antennas
To: info-hams@ucsd.edu

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: In article <CKvGDJ.GFv@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
: >Consider a vertical dipole in free space. You could insert a horizontal
: >infinite ground plane at the feedpoint without changing the radiation
: >pattern. Now you have two verticals, one pointing up, one pointing down.
: >Each vertical radiates half the power of the original dipole.

: True because each has half the current that flows in the entire dipole.

No, the current is the same, but the power is halved. There are (at least)
two ways to see this: 1) Only 1/2 the voltage is applied to each 1/4-wave
element. Since power = voltage times current, the power is 1/2.

2) The element is only 1/2 as long. So the same current results in
only 1/2 as much power radiated.

Actually, 2) can be derived from 1). (Left as an exercise for the reader :=)

: >Note
: >that the upper vertical (over a groundplane) can generate the same
: >field strength as the dipole (in free space), but with only 1/2 the power.

: No, I disagree with the way you're saying this. The upper vertical in
: this thought experiment has half the current of the dipole and so generates
: half the field. The ground mirror is supplying a 3 db reflection gain that
: makes up for the lower field produced by the current in the upper vertical.

Nope, see above.

: >Now consider a dipole suspended a half wavelength or more over an infinite
: >ground plane. In some directions, it will have 6 dB gain over a dipole
: >in free space, which gives 3 dB gain over the vertical. In other directions,
: >the field will be zero. If you averaged the radiated power over all
: >directions (half sphere), you would find it sums to the same power as the
: >1/4-wave vertical (also averaged over all directions.)

: True, but gain in the main lobe (what we normally mean when we talk about
: gain) is 2X that of the vertical. And in the real world of lossy ground
: planes that make poor current mirrors, the horizontal dipole has a greater

: efficiency.

But to get the 6 dB gain, the dipole depends on ground reflections, just as the vertical does. It gets very complex trying to compare ground losses of ground-mounted verticals versus horizontal dipoles because of the many variables involved (type of earth, number of radials, height above ground, vertical radiation angle, etc. etc.). That's why assuming a perfect ground gives a much more usable standard of comparison.

AL N1AL

Date: 10 Feb 1994 05:36:26 GMT
From: agate!darkstar.UCSC.EDU!cats.ucsc.edu!haynes@network.ucsd.edu
Subject: W2NSD
To: info-hams@ucsd.edu

There was an item in Science magazine, 4 Feb issue, says Wayne is about to publish a magazine titled "Cold Fusion"

--

haynes@cats.ucsc.edu
haynes@cats.bitnet

"Ya can talk all ya wanna, but it's dif'rent than it was!"
"No it aint! But ya gotta know the territory!"
Meredith Willson: "The Music Man"

Date: Fri, 4 Feb 1994 12:17:17 GMT
From: munnari.oz.au!metro!news.cs.su.oz.au!harbinger.cc.monash.edu.au!
yeshua.marcam.com!nic.hookup.net!paladin.american.edu!zombie.ncsc.mil!admii!
ovation!ramcad.pica.army.mil!mellis@network.
To: info-hams@ucsd.edu

References <ah301-260194121225@129.228.248.39>, <2i8rnf\$o5n@explorer.clark.net>,
<CKM79r.45H@sunsrvr6.cci.com>m
Reply-To : mellis@ramcad.pica.army.mil (Mark Ellis)
Subject : Re: htx-202 or dj-162 ?

>>>I'd like to get comments and opinions from people in the net who
>>>have actually used both.

>>>currently, I am leaning towards the dj-162 because of its wide
>>>receive.

>>

>>The HTX202 is a good radio. It comes with the CTCSS, DTMF squelch, and

>>it can store telephone numbers. It has 14 memories, I think.

>>

>> Matt Roberts N3GZM

>

>I'll second the motion. The HTX-202 is also more sensitive on receive
>than my ICOM-27H, of a late 70's or early 80's vintage. And the price
>is right when Radio Shack runs one of their periodic "sales".

>

>73...Jim

>N2VNO

And my htx-202 is still working after I dropped it last nite. Of course,
it was cushioned by the concrete floor it landed on :-). Or maybe :-).

I got mine on sale for \$200 last summer.

--- Mark Ellis n2wzb

End of Info-Hams Digest V94 #130
